PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT
NOF TRANSMITTATE
NAL SEADE To: C.G MERSEREAU NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND **SUITE 820** MINNEAPOLIS, MN 55402 THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION (PCT Rule 44.1) Date of mailing 12 MAY 2010 (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION See paragraphs 1 and 4 below 20030304.WP.CIP International application No. International filing date (day/month/year) 25 February 2010 (25.02.2010) PCT/US 10/00552 Applicant TRAVANTI PHARMA INC.

1.	Ø	The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.
		Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):
		When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.
		Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 338 8270
		For more detailed instructions, see the notes on the accompanying sheet.
2.		The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3.		With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
		the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
		no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4.	Rem	inders
	inten appli	tly after the expiration of 18 months from the priority date, the international application will be published by the national Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international cation, or of the priority claim, must reach the international Bureau as provided in Rules 90bis. 1 and 90bis. 3, respectively, the the completion of the technical preparations for international publication.
	inten	applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the national Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an national preliminary examination report has been or is to be established. These comments would also be made available to ublic but not before the expiration of 30 months from the priority date.

Name and mailing address of the ISA/US	Authorized officer:
Mail Stop PCT, Altn: ISA/US Commissioner for Patents	Lee W. Young
P.O. Box 1450, Alexandria, Virginie 22313-1450	PCT Helpdesk: 571-272-4300
Facsimile No. 571-273-3201	PCT OSP: 571-272-7774

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's

acts for entry into the national phase before those designated Offices.

Guide, Volume II, National Chapters and the WIPO Internet site.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 20030304.WP.CIP	FOR FURTHER ACTION	as well	see Form PCT/ISA/220 as, where applicable, item 5 below.					
luternational application No.	International filing date (day/n	onth/year)	(Earliest) Priority Date (day/month/year)					
PCT/US 10/00552	25 February 2010 (25.02.2010)		26 March 2009 (26.03.2009)					
Applicant TRAVANTI PHARMA INC.								
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.								
This international search report consists	of a total of sheets. copy of each prior art document	aited in this	second					
	copy of each prior are document	Citcu in uns	egjust.					
1. Basis of the report	tara at a transfer at the second							
a. With regard to the language, the	international scarch was carried ication in the language in which		asis of:					
rum,	ternational application into	n was inco.	union in the teneurous of					
	d for the purposes of internation	al search (Ru	which is the language of tles 12.3(a) and 23.1(b)).					
b. This international search reauthorized by or notified to	eport has been established takin this Authority under Rule 91 (R	g into accou ule 43.6 <i>bis</i> (a	nt the rectification of an obvious mistake					
c. With regard to any nuclent	ide and/or amino acid sequenc	disclosed in	the international application, see Box No. 1.					
2. Certain claims were found	l unsearchable (see Box No. 11)							
3. Unity of invention is lacki	ng (see Box No. III).							
4. With regard to the title,								
the text is approved as submitted by the applicant.								
the text has been established by this Authority to read as follows:								
5. With regard to the abstract,								
the text is approved as subm	the text is approved as submitted by the applicant.							
the text has been established may, within one month from	d, according to Rule 38.2, by this internation of this internation.	Authority as actional scarc	s it appears in Box No. IV. The applicant th report, submit comments to this Authority.					
With regard to the drawings,								
a. the figure of the drawings to be	published with the abstract is Fig	ure No. 1						
as suggested by the ap								
	thority, because the applicant fa							
as selected by this Au	thority, because this figure bette	characterize	es the invention.					
b. none of the figures is to be	published with the abstract.	***************************************	NAMES AND ADDRESS OF THE PARTY					

Form PCT/ISA/210 (first sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.

			PCT/US 10	0/00552		
IPC(8) - USPC -	A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - B01J 10/00, B01J 10/02, B01J 12/00, B01J 12/02, B01J 14/00, B01J 15/00 (2010.01) USPC - 422/129 According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIEL	DS SEARCHED		00000000000000000000000000000000000000			
	ocumentation searched (classification system followed b 1J 10/00, B01J 10/02, B01J 12/00, B01J 12/02, B01J 1 /129					
801J 16/00 206/216, 22	tion searched other than minimum documentation to the e B01J 19/00 3, 349, 363, 364, 365, 366, 570	WWW.				
I PubWESTIL	ata base consulted during the international search (name JSPT,PGPB,EPAB,JPAB); Google Scholar; ns Used: drug, medicine, medication, pharmaceutical, on, HPMC			-		
C. DOCU	MENTS CONSIDERED TO BE RELEVANT			9,000,000,000		
Category*	Citation of document, with indication, where s	ppropriate, of the releva	nt passages	Relevant to claim No.		
X	US 2007/0250339 A1 (MALLETT et al.) 25 October 2 para[0020], para[0039], para[0101], para[0163] - [018	007 (25.10.2007) para[00	003], para[0016],	1, 2, 7, 11 and 13		
Y	harmen harmen barrele construction of the cons	ni, panyorooj		3-6, 8-10, 12 and 14-28		
Y	Y US 5,597,617 A (DELISO et al.) 28 January 1997 (28.01.1997) Abstract, col 1, in 14-34, col 2, in 20-48, col 5, 48-59, col 9, in 27-55.					
*	Y US 2006/0110080 A1 (THOMAS et al.) 25 May 2008 (25.05.2006) para[0097], para[0104] - para[0107] and FIG. 2.					
	E US 2009/0131732 A1 (DAY) 21 May 2009 (21.05.2009) Entire document.					
i hannand	Further documents are listed in the continuation of Box C.					
"A" docume to be of	to be of particular relevance the principle or theory underlying the invention					
"E" earlier application or patent but published on or after the international "X" document of particular relevant filling date "X" document which may throw doubts on priority claim(s) or which is step when the document is taken				slaimed invention cannot be ared to involve an inventive		
special	Continued with one of more given governments, such companies					
Date of the	actual completion of the international search	Date of mailing of the	international searc	ch report		
01 April 201	0 (01.05.2010)	12	WAY 2010			
Mail Stop PC	ailing address of the ISA/US T, Attr: ISA/US, Commissioner for Patents 0, Alexandria, Virginia 22313-1450	Authorized officer:	Lee W. Young			
	0. 571-273-3201	PCT Helpdesk; 571-272-4300 PCT OSP: 571-272-7774				

Form PCT/ISA/210 (second sheet) (July 2009)

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY PCT To: C.G MERSEREAU NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 WRITTEN OPINION OF THE MINNEAPOLIS, MN 55402 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) 12 MAY 2010 Date of mailing (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION 20030304.WP.CIP See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/US 10/00552 25 February 2010 (25.02.2010) 26 March 2009 (26.03.2009) International Patent Classification (IPC) or both national classification and IPC IPC(8) - B01J 10/00, B01J 10/02, B01J 12/00, B01J 12/02, B01J 14/00, B01J 15/00 (2010.01) USPC - 422/129 Applicant TRAVANTI PHARMA INC. 1. This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention Reasoned statement under Rule 43bis. I(a)(i) with regard to novelty, inventive step or industrial applicability; Box No. V citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application 2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 3. For further details, see notes to Form PCT/ISA/220.

Date of completion of this opinion

01 April 2010 (01.05.2010)

Authorized officer:

PCT Helpdask: 571-272-4300

PCT OSP: 671-272-7774

Lee W. Young

Form PCT/ISA/237 (cover sheet) (July 2009)

Name and mailing address of the ISA/US

Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450

Mail Stop PCT, Attn: ISA/US

Facsimile No. 571-273-3201

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 10/00552

Ber	No. I	Basis of this opinion
I.	with (egard to the language, this opinion has been established on the basis of: the international application in the language in which it was filed. a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.	With restabli	egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of a sequence listing filed or furnished: caus) on paper
		in electronic form
	b. (tii	ne) in the international application as filed together with the international application in electronic form
		subsequently to this Authority for the purposes of search
4.		In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5.	Additio	onal comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 10/00552

Box No. V Reasoned statement un citations and explanati		ibls.1(a)(i) with regard to novelty, inventive step or industrial app ing such statement	licability;
1. Statement			······································
Novelty (N)	Claims	1-28	YES
1,00,440,3 (1,1)	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-28	NO
Industrial applicability (IA)	Claims	1-28	YES
	Claims	None	NO
medications (para [0003], [0010], [0039]), (a) a disposable (para [0101]), sealable (para [0101]), se	sald system in coars [0153]) or in said contein erial selected ild medication (para [0168]). Fig. a [0164]. Fig. a [0164]. Fig. a lotted, so as to provide so a	container that can be opened to receive an amount of unused medicationer for treating said medication on contact (para [0168]; solidifying age if from the group consisting of adsorption and chemisorption agents that is such that insertion of said medication into said container will cause stand. 10) to capture a treated medication (pera [0153], [0155]), 2, which is seatable (para [0167]). It would have been obvious to one stevent accidental leaks during the use of the device. In claim 1 wherein said active binding agent includes material selected as and combinations thereof (para [0168]; chemisorption: "absorbent" is in claim 1 wherein said container is impervious to organic vapors (para is system as in claim 1 and 7, respectively, but falls to describe wherein the closure is opened and closed multiple times until it is full, when it is \$169-[0173]). Mellett further describes a sealable closure (para [0167] initial closure also sealable so as to prevent accidental leaks during the	on substance onts), said at generally sid willed in the by a said closure at then locked), it would be use of the
JeLiso et al. (herelnafter: DeLiso).		der PCT Article 33(3) as being obvicus over Mallatt In view of US 5,59	
arbon.		in claim 2, but fails to describe wherein said active binding agent include	
i).		sition with activated carbon binding agents dispersed therein (Abstract	
Mallett because Mallett describes using divated carbon is known in the art with s	porous absoruch character	iffize activated carbon as the binding agent as described by Del.iso on rbent materials without limiting the material (para [0168]) and Del.iso on fistics (col. 1, in 14-34) and further provides an updated composition of inactivate the pharmaceutical (col. 2, in 42-47).	lescribes the
s per claim 4, Mailett and DeLiso describ abstance to suspend sald activated carbo	es the dispos on to improve	sal system as in claim 3, DeLiso describes further comprising a susper contact with said medication (col 2, in 20-48).	sion
s per claims 5 and 6, Mallett and DeLiso uspension substance further comprises a Abstract, col 9, in 27-55).	describes the gelling agent	s disposal system as in claim 4 and 5, respectively, DeLiso describes w It AND wherein said gelling agent comprises hydroxypropylmethylcellul	wherein said lose (HPMC)
s per claim 10, Mallett and DeLiso descri article size generally between about 8 m	ibe the dispos ash and about	sal system as in claim 3, Dal.iso describes wherein said activated carb it 325 mesh (col 9, in 27-55).	on is of a
Please See Continuation Sheet	***********************		

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 10/00552

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In case the space in any of the preceding boxes is not sufficient.

(col 2, in 42-47).

As per claim 12, Mailett and DeLiso describe the disposal system as in claim 6, Mallett further describes wherein said closure is rescalable (para [0016], [0020], [0153]-[0154]).

As per claim 14, Mailett describes parts for disposing of unused medications (Abstract, para [0003], [0039]) comprising: (a) a disposable (para [0101]) sealable (para [0153]) container for accommodating an amount of unused medication; (b) an amount of an active binding agent for treating said medication on contact to be used in said container (para [0168]);

but falls to describe (c) optionally, an amount of a suspension substance to suspend said active binding agent to promote contact with said medication OR providing the contents in a form of a kit. However, it would have been obvious to one skilled in the art to provide the contents in the form of a kit such that the parts could be

packaged, stored and shipped differently, thus potentially saving costs. Furthermore, DeLiso describes a porous absorbent composition with active binding agents dispersed therein (Abstract, col 2, in 20-30) with a suspension substance to suspend said active binding agent to promote end improve contact with the substance of interest (col 2, in

20-481 it would have been obvious to one skilled in the art to utilize a binding agent as described by DeLiso on the device of Mellett because Mailett describes using porous absorbent materials without limiting the material (para [0168]) and DeLiso describes that activated carbon is known in the art with such characteristics (col 1, in 14-34) and further provides an updated composition of activated carbon which is dispersed within a suspension substance, the combination of which would provide high absorbency and help inactivate the pharmaceutical

As per claim 15, Mallett and DeLiso describes the kit as in claim 14, DeLiso describes wherein said active binding agent includes activated carbon (col 2, in 20-30).

As per claim 16, Mailett and DeLiso describes the kit as in claim 15, DeLiso describes wherein said activated carbon is of a particle size generally between about 8 mesh and about 325 mesh (col 9, in 27-55).

As per claim 17, Mailett and DeLiso describes the kit as in claim 14, DeLiso describes wherein said suspension substance further comprises a gelling agent (Abstract, col 9, in 27-55; HPMC).

As per claim 18, Mallett and DeLiso describes the kit as in claim 14, DeLiso describes wherein further comprising a substance selected from the group consisting of exident, antagonist, and irritant compounds, pre-adsorbed on a portion of said binding agent (col 5, in 48-59).

As per claim 19, Mallett and DeLisc describes the kit as in claim 18, DeLisc describes wherein wherein said activated carbon is of a particle size generally between about 6 mesh and about 325 mesh (col 9, in 27-55).

As per claim 20, Mallett describes a disposal system (Abstract) for reducing substance abuse or environmental contamination from unused medications (para [0003], [0039]), said system comprising:

(a) a disposable(para [0101]), sealable (para [0153]) container that includes a provision for opening to provide an access for receiving an amount of unused medication therein;

(b) an amount of an active binding agent (para [0168]: solidifying agents) in said container for treating said unused medication on contact to inhibit later independent extraction of said medication (para [0168]);

(d) closure (para [0164],FIG. 10) for closing said disposable container thereby capturing a treated medication (para [0153], [0155]), but talls to describe the closure being sealable OR the container in the form of a soft pouch OR including an amount of activated carbon OR (c) optionally, a suspension substance including a gailing agent in said container for suspending said activated carbon.

However, Mallett does describe a supplemental closure, which is sealable (para [0167]). It would have been obvious to one skilled in the art to make the initial closures also sealable so as to prevent accidental leaks during the use of the device,

It would have been further obvious to one skilled in the art to provide the container in the form of a soft pouch, or any other form, so as to meet the space, cost, flexibility needs of the application and because soft plastic pouches are known receptacles.

Furthermore, DeLisc describes a porous absorbent composition with active carbon binding agents dispersed therein (Abstract, col 2, in 20-30) with a suspension substance to suspend said active binding agent to promote and improve contact with the substance of interest (col 2. in 20-48).

it would have been obvious to one skilled in the art to utilize the carbon binding agent as described by DeLiso on the device of Mallett because Mallett describes using porous absorbent materials without limiting the material (para [0168]) and DeLiso describes that activated carbon is known in the art with such characteristics (col 1, in 14-34) and further provides an updated composition of activated carbon which is dispersed within a suspension substance, the combination of which would provide high absorbency and help inactivate the pharmaceutical (coi 2, in 42-47).

As per claim 21 and 24, Mailett and DeLiso describes the disposal system as in claims 20 and 3, respectively, DeLiso describes further comprising an ingredient selected from the group consisting of antagonist, exident and irritant compounds or a combination thereof preadsorbed on a portion of sald activated carbon (col 5, in 48-59).

As per claim 22-23, Mailett and DeLiso describes the disposal system as in claims 20 and 21, respectively, DeLiso describes wherein said activated carbon is of a particle size generally between about 8 mesh and about 325 mesh (col 9, in 27-55)

As per claim 25, Mallett and DeLiso describes the disposal system as in claim 20, but fail to describe wherein said closure is reseatable. However, Mallett does describe wherein the closure is opened and closed multiple times until it is full, when it is then locked and sealed (para [004], [0152]-[0153], [0020], [0167], [0169]-[0173]). Mallett further describes a sealable closure (para [0167]). It would have been obvious to one skilled in the art to make the Initial closure also sealable so as to prevent accidental leaks during the use of the device.

Please See Continuation Sheet	Please	See	Continuation	Sheet
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 10/00552

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:
——Box V.2. Citations and explanations—

As per claim 26, Maliett describes a method of disposing of unused medications (Abstract, para [0003], [0039]) comprising: (a) providing a sealable (para [0153], [0156]) container for containing treated unused medication (para [0168]);

(b) providing an amount of an active binding agent (para [0168]; solidifying agents) for treating said unused medication;

(c) opening said container and inserting said unused medication (para [0168], [0156]);

(e) causing said unused medication to contact said binding agent in said container (para [0168]); and

(f) sealing said container (para [0166], [0167]).

but falls to describe including activated carbon OR (d) optionally providing an amount of a substance selected from the group consisting of suspension substances for said activated carbon and substances to dissolve solid medications in said containers;

However, DeLiso describes a porous absorbent composition with active carbon binding agents dispersed therein (Abstract, col 2, in 20-30) with a suspension substance to suspend said active binding agent to promote and improve contact with the substance of interest (col 2, in

It would have been obvious to one skilled in the art to utilize the carbon binding agent as described by DeLiso on the device of Mallett because Mallett describes using porous absorbent materials without limiting the material (para [0168]) and DeLiso describes that activated carbon is known in the art with such characteristics (col 1, in 14-34) and further provides an updated composition of activated carbon which is dispersed within a suspension substance, the combination of which would provide high absorbency and help inactivate the pharmaceutical (col 2, in 42-47).

As per claim 27, Mailett and DeLiso describe the method as in claim 26, but fall to describe wherein (c) includes adding an amount of water to said container to dissolve said medication or cause it to contact a patch. However, it would have been obvious to one skilled in the art to dissolve the medication if it were a solid dose, so as to physically allow it to be filtered and captured by the binding agents.

As per claim 28, Mailett and DeLiso describe the method as in claim 26, but fails to describe wherein said binding agent is contained in a gel. However, Del. Iso describes wherein said binding agent is dispersed in a gelling agent which is later solidified (Abstract, col 9, in 27-55). It would have been obvious to one skilled in the art to provide the composition in the gelled state so as to better conform flexible containers.

Claims 8-9 lack an inventive step under PCT Article 33(3) as being obvious over Mallett In view of US 2006/0110080 A1 to Thomas et al. (hereinafter: Thomas).

As per claim 8, Mallett describes the disposal system as in claim 1, but falls to describe wherein said closure is selected from adhesive seals and plastic container zipping reusable closure devices. However Thomas describes a disposable medical bag/container (para [0097]) which comprises a plastic container zipping reusable closure device (FIG. 2; para [0063], [0064]). It would have been obvious to one skilled in the art to utilize the type of beg/closure described by Thomas because they are a very common type of bags which are readily available and inexpensive.

As per claim 9, Mallett describes the disposal system as in claim 1, but fails to describe wherein said container is in the form of a pouch which includes a layer of metal foil. However Thomas describes a disposable medical bag/container (para [0097]) which comprises a pouch (FIG. 2) which includes a layer of metal foil (para [0104], [0107]). It would have been obvious to one skilled in the art to utilize the type of bag/closure described by Thomas because they are a very common type of bags which are readily available and inexpensive, and the addition of the foll layer would prevent the leaching of the active (and possibly noxious) agents into the environment (Thomas: para [0105]).

Claims 1-28 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.